LISTING OF CLAIMS:

Claim 1 (Original) Surface-modified, pyrogenically produced oxides doped by aerosol.

Claim 2 (Previously presented) Surface-modified, pyrogenically produced oxides doped by aerosol, characterized in that the oxides are selected from the group consisting of SiO_2, Al_2O_3, TiO_2, B_2O_3, ZrO_2, In_2O_3, ZnO, Fe_2O_3, Nb_2O_5, V_2O_5, WO_3, SnO_2 and GeO_2.

Claim 3 (Currently amended) The surface-modified, pyrogenically produced oxides according to claim 1 or 2, wherein the surface-is modified with one or several compounds selected from the following groups:

a) Organosilanes mixture having the formulas ~~of the type~~ $(RO)_3Si(C_nH_{2n+1})$ and $(RO)_3Si(C_nH_{2n-1})$,

R = alkyl,

n = 1 – 20;

b) Organosilanes mixture having the formulas ~~of the type~~ $R'_x(RO)_ySi(C_nH_{2n+1})$ and $(RO)_3Si(C_nH_{2n+1})$

R = alkyl,

R' = alkyl,

R' = cycloalkyl

n~~N~~ = 1 – 20,

x+y = 3,

x = 1, or 2,

y = 1, or 2;

c) Halogen organosilanes having the formulas ~~of the type~~ X_3 $Si(C_nH_{2n+1})$ and X_3 $Si(C_nH_{2n-1})$

X = Cl, or Br,

n = 1 – 20;

d) Halogen organosilanes having the formulas ~~of the type~~ X_2 (R') $Si(C_nH_{2n+1})$ and

X_2 (R') $Si(C_nH_{2n-1})$,

X = Cl, or Br

R' = alkyl

R' = cycloalkyl

n = 1 – 20;

e) Halogen organosilanes having the formulas ~~of the type~~ X $(R')_2$ $Si(C_nH_{2n+1})$ and

X $(R')_2$ $Si(C_nH_{2n-1})$,

X = Cl, or Br;

R' = alkyl

R' = cycloalkyl

n = 1 – 20;

f) Organosilanes having the formula ~~of the type~~ $(RO)_3Si(CH_2)_m$-R'

R = ~~alky,l~~ alkyl

m = ~~0.1 — 20~~ 0, or 1-20,

R' = methyl-, aryl- (~~e.g.~~., $-C_6H_5$, substituted phenyl groups,)

$-C_4F_9$, OCF_2-CHF-CF_3, $-C_6F_{13}$, -O-CF_2-CHF_2,

$-NH_2$, $=N_3$, -SCN, -CH=CH_2, -NH- CH_2-CH_2-NH_2,

-N-(CH_2-CH_2-CH_2NH_2)$_2$,

-OOC(CH_3)c = CH_2,

-OCH_2-CH(O) CH_2,

-NH-CO-N-CO- $(CH_2)_5$,

-NH-COO-CH_3, -NH-COO-CH_2-CH_3, -NH-$(CH_2)_3Si$(OR~~or~~)$_3$,

-S_x-$(CH_2)_3Si(OR)_3$,

-SH, ~~and~~ or

-NR'R''R''', wherein R' = alkyl, or aryl; R'' = H, alkyl, ~~or~~ aryl; and R''' = H, alkyl, aryl, benzyl, or C_2H_4NR'''' R''''' with R'''' = H, or alkyl and

R''''' = H, or alkyl;

g) Organosilanes having the formula ~~of the type~~ $(R'')_x$ $(RO)_y$ $Si(CH_2)_m$-R'

R'' = alkyl, or cycloalkyl,

x+y = 2,

x = 1, or 2,

y = 1, or 2,

m = ~~0.1 to 20~~ 0, or 1 to 20,

R' = methyl-, aryl, $-C_6H_5$, substituted phenyl groups,

$-C_4F_9$, $-OCF_2-CHF-CF_3$, $-C_6F_{13}$, $-O-CF_2-CHF_2$,

$-NH_2$, $-N_3$, SCN, $-CH= CH_2$, $-NH-CH_2-CH_2-NH_2$,

$-N-(CH_2-CH_2-NH_2)_2$,

$-OOC\ (CH_3)C = CH_2$,

$-OCH_2-CH(O)\ CH_2$,

$-NH-CO-N-CO-(CH_2)_5$,

$-NH-COO-CH_3$, $-NH-COO-CH_2-CH_3$, $-NH-(CH_2)_3Si(OR)_3$,

$-S_x-(CH_2)_3Si(OR)_3$,

-SH , ~~and~~ or

$-NR'R''R'''$, wherein R' = alkyl~~,~~ or aryl; R'' = H,

alkyl, or aryl; and R''' = H, alkyl, aryl, benzyl, or

$C_2H_4NR''''\ R'''''$ with R'''' = H, or alkyl and

R''''' = H, alkyl~~)~~ ;

h) Halogen organosilanes having the formula ~~of the type~~ $X_3Si\ (CH_2)_m-R'$

X = Cl, or Br,

m = 0, 1 – 20,

R' = methyl-, aryl., $-C_6H_5$, substituted phenyl groups

$-C_4F_9$, $-OCF_2-CHF-CF_3$, $-C_6F_{13}$, $-O-CF_2-CHF_2$,

$-NH_2$, $-N_3$, SCN, $-CH=CH_2$, $-NH-CH_2-CH_2-NH_2$,

$-N-(CH_2-CH_2-NH_2)_2$,

$-OOC\ (CH_3)C = CH_2$,

$-OCH_2-CH(O)\ CH_2$,

$-NH-CO-N-CO-(CH_2)_5$,

$-NH-COO-CH_3$, $-NH-COO-CH_2-CH_3$, $-NH-(CH_2)_3Si(OR)_3$,

$-S_x-(CH_2)_3Si(OR)_3$, ~~and~~ or

-SH;

i) Halogen organosilanes having the formula ~~of the type~~ $(R)X_2Si(CH_2)_m-R'$

X = Cl, or Br,

R = alkyl such as methyl, - ethyl-, or propyl-,

m = 0, or 1 – 20,

R' = methyl-, aryl- , $-C_6H_5$, substituted phenyl groups,

$-C_4F_9$, $-OCF_2-CHF-CF_3$, $-C_6F_{13}$, $-O-CF_2-CHF_2$,

$-NH_2$, $-N_3$, SCN, $-CH=CH_2$, $-NH-CH_2-CH_2-NH_2$,

$-N-(CH_2-CH_2-NH_2)_2$,

$-OOC\ (CH_3)C = CH_2$,

$-OCH_2-CH(O)\ CH_2$,

$-NH-CO-N-CO-(CH_2)_5$,

$-NH-COO-CH_3$, $-NH-COO-CH_2-CH_3$,

$-NH-(CH_2)_3Si(OR)_3$,

$-S_x-(CH_2)_3Si(OR)_3$, or

-SH;

(j) Halogen organosilanes having the formula ~~of the type~~ $(R)_2X\ Si(CH_2)_m-R'$

X = Cl, or Br,

R = alkyl,

m = 0, or 1 – 20,

R' = methyl-, aryl-~~.~~, $-C_6H_5$, substituted phenyl groups,

$-C_4F_9$, $-OCF_2-CHF-CF_3$, $-C_6F_{13}$, $-O-CF_2-CHF_2$,

$-NH_2$, $-N_3$, SCN, $-CH=CH_2$, $-NH-CH_2-CH_2-NH_2$,

$-N-(CH_2-CH_2-NH_2)_2$,

$-OOC\ (CH_3)C = CH_2$,

$-OCH_2-CH(O)\ CH_2$,

$-NH-CO-N-CO-(CH_2)_5$,

$-NH-COO-CH_3$, $-NH-COO-CH_2-CH_3$, $-NH-(CH_2)_3Si(OR)_3$,

$-S_x-(CH_2)_3Si(OR)_3$ or

-SH;

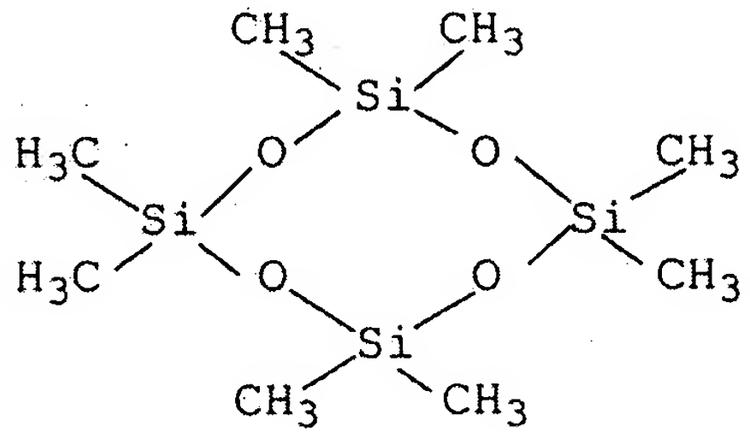
(k) Silazanes having the formula ~~of the type~~

$$R'R_2Si-\underset{\substack{|\\H}}{N}-SiR_2R'$$

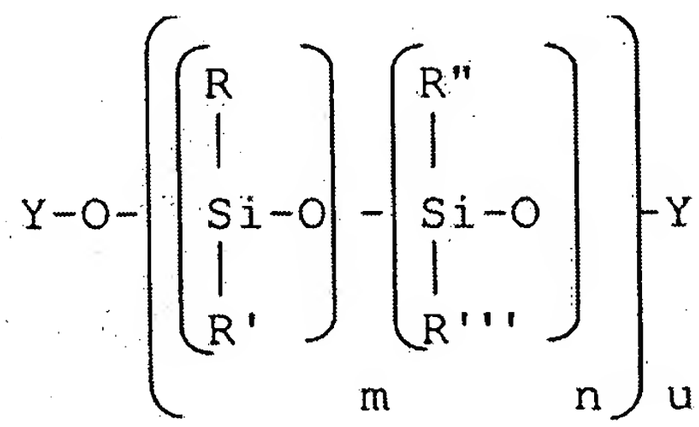
R = alkyl,

R' = alkyl, <u>or</u> vinyl; or

(l) Cyclic polysiloxanes ~~of the type~~ D 3, D 4 or D 5, <u>where D4 has the formula</u>:



m) Polysiloxanes or silicone oils <u>having the formula</u> ~~of the type~~



m = 0,1,2,3,...∞
n = 0,1,2,3,...∞
u = 0,1,2,3,...∞

Y=CH_3, H, C_nH_{2n+1} n=1-20
Y=$Si(CH_3)_3$, $Si(CH_3)_2H$

$Si(CH_3)_2OH$, $Si(CH_3)_2(OCH_3)$,

$Si(CH_3)_2(C_nH_{2n+1})$ n=1-20,

wherein,

R = alkyl, aryl, $(CH_2)_n$-NH_2, or H,

R' = alkyl, aryl, $(CH_2)_n$-NH_2, or H,

R'' = alkyl, aryl, $(CH_2)_n$-NH_2, or H,

R'''= alkyl, aryl, $(CH_2)_n$-NH_2, or H.;

Claim 4 (Previously presented) A method of producing the surface-modified oxides in accordance with claim 1 or 2, comprising placing pyrogenically produced oxides doped by aerosol in a suitable mixing container, spraying the oxides under intensive mixing with the surface-modification reagent or a mixture of several surface-modification reagents.

Claim 5 (Previously presented) In a reinforcing filler composition wherein the improvement comprises the surface-modified oxides according to claim 1 or 2 as reinforcing filler.

Claim 6 (Original) The method of claim 4 wherein the spraying step includes spraying with water and/or acid prior to the spraying with the surface-modification reagent or a mixture of several surface-modification reagents.

Claim 7 (Original) The method of claim 4 further comprising re-mixing at 15 to 30 minutes and tempering at a temperature of 100 to 400 °C for a period of 1 to 6 hours.

Claim 8 (Original) The surface-modified, pyrogenically produced oxides according to claim 3 wherein the cyclic polysiloxanes is type D 4.